# Foreign Agriculture

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Breadmaking in a small bakery in Iran—an important market for U.S. wheat.

# U.S. Farm Exports To Iran Rebound

By Michael E. Kurtzig

U.S. farm exports to Iran in the fiscal year just ended are estimated at $500 million—more than triple their reduced 1976/77 level. Strong consumer demand and a dip in domestic crop production contributed to the sharp rebound in U.S. sales to this important Mideastern market.

Recovering strongly from their poor showing of fiscal 1976, U.S. farm exports to Iran surpassed $350 million in the first 9 months of fiscal 1977 (Oct.-Sept.) and probably exceeded $500 million in the full year.

This is more than three times the $138 million shipped in fiscal 1976 (July-June), when port congestion and a temporarily sated market caused demand from Iran to relax. The country's import trade in fiscal 1976 also was influenced by some exceedingly good domestic crops, whereas farm output since has declined a bit. Combined with rapidly increasing food consumption, such a setback has a direct effect on farm imports.

A similar combination boosted U.S. agricultural exports to Iran to a record $757 million in fiscal 1975 (July-June), at which time forecasters were viewing Iran as an imminent billion-dollar U.S. farm market. These expectations—based on Iran's rapidly growing petroleum revenues and determination to build a modern economy in as short a time as possible—were dashed in the ensuing import decline. However, the country is still viewed as one of the most promising U.S. farm markets in the Middle East.

Currently, the Iranian economy is continuing to grow at a rapid pace, with gross national product estimated to hit $58.2 billion (at 1974/75 constant prices) during 1977/78 for an 8 percent gain from last year. But the country's import push has moderated enough to allow some catching up with the problems that accompanied its buying spree of 1975.

Concurrently, highly optimistic goals for industrial and agricultural enterprises have been scaled back to more realistic levels, pointing to steady—if less spectacular—growth in imports of grains and the other needed raw materials.

While this moderation of demand brought a slowdown in trade during fiscal 1976, it also laid the basis for gains in fiscal 1977—and for the advance to $352.8 million in U.S. farm sales to Iran during the first 9 months of last year. In contrast, U.S. agricultural exports to Iran in the same period of fiscal 1976 totaled only $97.5 million.

During fiscal 1977, grains and fats and oils continued to maintain their recent domination of U.S. farm sales to Iran, accounting for 90 percent, or $318 million, of sales in the first 9 months. The United States also shipped a variety of other products during October-June 1976/77, including 3,000 head of dairy cattle (valued at $2.5 million), 2,400 tons of tobacco ($8.3 million) 331 tons of beef ($1.6 million), and $3 million worth of cattle hides.

Some of last year's rebound no doubt was merely compensatory buying following a year of below-trend activity. But U.S. farm sales also were influenced by the continuing economic growth, which has boosted per capita income in Iran to nearly $1,700, and by an agricultural sector that so far has not been able to keep pace with demand. Indeed, the greatest strides so far are being made in poultry and livestock enterprises, whose growing livestock feed requirements have stimulated imports of grains and feeds.

In addition, infrastructural difficulties, particularly at ports, have been cleared up, and ship offloading time—once almost 5 months—is now only a few days to a couple of weeks in most cases. At the same time, internal transportation capacity has been increased and, while still not up to expectations, has improved enough to get imports into the country at a much accelerated rate.

According to Iranian statistics, $2.0 billion worth of agricultural products were imported in 1975/76, including 2.1 million tons of grains, 597,449 tons of sugar and products, 377,711 of fruits and nuts, 268,765 of animal and vegetable fats and oils, 71,310 of meat and offals, significant numbers of live animals, and dairy and poultry products.

On the export side, petroleum continued to dominate Iranian trade, bringing in some $21.5 billion in 1976/77 for a 7 percent gain from the previous year. Other exports added up to just $680 million, of which $300 million were agricultural products—cotton, fruits and nuts, hides and skins, animal products, vegetable gums, dyes, coffee, tea, and condiments.

In calendar 1976, the United States imported only about $62 million of such products—out of a total import from Iran of $1.5 billion.

Agricultural production in Iran, meantime, has slipped slightly from the record high achieved in 1976. The 1976 per capita index for farm production rose to 130 from 121 in 1975 (1961-65=100), while the index for total farm production climbed to a peak of 189 from 172.

**Grains.** In the wake of drought in the Provinces of Fars and Khuzestan, 1977 production of wheat declined 9 percent from the 1976 level to 5 million tons, and that of barley dipped 4 percent to 1.1 million.

Although the country has enjoyed 3 years of fairly stable wheat production, including a record crop in 1976, wheat has been subject to wide variations in the past and will probably continue vulnerable in the future. This vulnerability reflects the fact that over 60 percent of the crop is grown on nonirrigated land in a country subject to frequent droughts.

Iran hopes to offset some of these problems by expanding irrigation, as well as by modernizing production techniques that now include use of fertilizer on only 25 percent of the land area and reliance on hand harvesting for 50 percent of the crop (and the share harvested by hand rises to 65

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percent for barley).

So far, however, production gains have lagged well behind growth in demand, with the result that wheat imports have risen sharply in the last few years. Total imports of wheat in 1977/78 (July-June) are estimated at 1.5 million tons and could go higher as a result of the smaller 1977 crop. The United States is expected to supply 1.2 million tons of these imports.

One moderating factor on the demand side may be the fact that Iran's per capita consumption of wheat already has reached one of the highest levels in the world—160 kilograms per year. That figure could well decline in coming years as Iranians—especially in urban areas—switch to more fruits and vegetables, meats, and dairy products to meet their caloric needs.

Iranian rice production is estimated at 900,000 tons (milled) for 1977, up 6 percent from the 1976 level and about 13 percent greater than in 1975. Consumption, however, has been growing at an even faster pace of around 10 percent or more a year, necessitating larger imports. Imports during calendar 1977 are estimated at 500,000 tons (milled), about 75 percent more than in calendar 1976, with the United States again holding the largest market share. Imports during 1978 are expected to continue at this high level.

Iran's feedgrain output has not made great strides in the recent past; at the same time, consumption has risen dramatically. Led by expansion in the poultry and livestock sectors, total coarse grain consumption, primarily of barley and corn, has increased from 1.1 million tons in July-June 1973/74 to an estimated 2 million tons in 1977/78. Imports were 200,000 tons in July-

*Top to bottom: Workers package cottonseed oil for the domestic market at a vegetable oil processing plant in Karaj, northeast of Tehran; exterior of the same plant; and dairy cattle on Sepaphour farm, which is just outside of Tehran. The farm has 3,000 animals, some of which were imported from the United States. These are some of the parent herds of the large dairy industry being developed in Iran.*

June 1973/74 and are estimated at 900,000 tons in 1977/78, with the U.S. share estimated at 120,000 tons and 575,000 tons, respectively.

As Iran's livestock and poultry sectors continue to expand, import demand for coarse grains should remain strong, likely exceeding 1 million tons in 1978/79.

**Oilseeds.** Despite Government efforts to expand production, particularly of soybeans, Iran's total oilseed output has not increased. Iran's 1976/77 consumption of edible oils has been estimated at 374,000 tons, with only 89,000 tons, or 24 percent, produced domestically.

During 1977/78, Iran is expected to import around 320,000 tons of vegetable oils, 50,000 of soybean meal, and 20,000 of cottonseed cake. In comparison, Iranian trade statistics show imports during 1976/77 of 250,000 tons of soybean oil, 20,000 of cottonseed oil, 10,000 of sunflowerseed oil, 5,000 of olive oil, and 15,000 of shortening.

In the past, the United States was Iran's major supplier of soybean oil, but Brazil recently has become an important supplier. In addition, sizable amounts of soybean oil, crushed from imported U.S. beans, have moved from European countries during the past year, indirectly boosting the U.S. market share.

A large deficit also exists in domestic production of animal grease, and Iran must import about half its requirements, or around 20,000 tons. Most of this comes from the United States.

**Poultry.** Iran's poultry industry is growing faster than probably any other rural activity and also ranks as the most technically advanced. If the Government continues to encourage expansion, and assures adequate feed supplies, Iran may reach self-sufficiency in poultry and eggs in the near future.

Poultry meat production has risen from 115,000 tons in 1975/76 to 150,000 in 1976/77 and is estimated at 215,000 this year.

Consumption gains, so far, have been even greater—shooting from 135,000 tons to an estimated 245,000 tons during the same time period. This means a likely 1977/78 consumption of 7.9 kilograms per person, compared with 5.7 last year.

**Livestock.** In 1975/76, Iran was about 85 percent self-sufficient in red meat, but this share appears to be declining in the face of booming demand. While domestic production of poultry, goat meat, and dairy beef has risen, local supplies of sheep and goat meat, regular beef, and pork have increased little, if any. At the same time, annual meat consumption appears to be increasing by 10-15 percent, sparking similar gains in import needs.

During 1976/77, Iran's sheep meat imports reportedly totaled about 58,000 tons, mostly from Australia and New Zealand. Beef imports during the same period were estimated at 22,000 tons, with France supplying 44 percent and Australia 39 percent.

Because of its high-value beef and high transportation costs, the United States has a distinct disadvantage in the Iranian meat market. However, it is shipping small but increasing quantities of high-quality beef to restaurants, hotels, and supermarkets.

The United States also continues as Iran's principal supplier of dairy breeding cattle, accounting for nearly 7,000 of the estimated 9,000 head of Holstein bred heifers imported in 1976/77. (Israel supplied around 2,000.)

While the Iranian Government is endeavoring to stimulate feedlot industries, poultry and dairy operations, and ranching, it also continues to subsidize consumption of mutton and poultry meat and to aid the country's consumers with strict price controls on meat.

As to future U.S. agricultural exports to Iran, past experiences indicate the risk of predicting trade directions. However, the country's continuing economic growth and concurrent increases in food needs, its so-far limited grain crop gains alongside booming livestock industries, and its strong trade ties with the United States bode well for U.S. sales there in coming years. □

**". . . infrastructural difficulties, particularly at ports, have been cleared up, and ship offloading time—once almost 5 months—is now only a few days to a couple of weeks in most cases."**

**U.S. Agricultural Exports to Iran in the First Three Quarters of 1976 and 1977**

| Commodity | 1976 | | 1977 | |
|---|---|---|---|---|
| | Quantity | Value | Quantity | Value |
| | *Metric tons* | *1,000 dollars* | *Metric tons* | *1,000 dollars* |
| Wheat | 51,000 | 7,306 | 945,847 | 103,686 |
| Rice | 129,945 | 44,834 | 404,214 | 127,832 |
| Barley | 17,746 | 2,448 | 112,443 | 13,040 |
| Corn | 52,580 | 5,426 | 162,517 | 17,609 |
| Pinto beans | 0 | 0 | 2,000 | 736 |
| Dried beans | 0 | 0 | 1,000 | 392 |
| Smoking tobacco | 875 | 3,058 | 2,400 | 8,336 |
| Tallow | 12,422 | 4,985 | 16,710 | 6,747 |
| Soybean oil, crude | 10,999 | 5,886 | 62,142 | 38,822 |
| Cottonseed oil | 5,161 | 3,080 | 9,596 | 6,463 |
| Total | — | 97,456 | — | 352,831 |

# Indo-Soviet Trade Logs Dramatic Growth

**By John B. Parker, Jr.**

Over the past decade, India has sent more farm commodities to the Soviet Union than any other developing country. And in recent years, Indo-Soviet trade has begun to soar. Total two-way trade this year may reach about $1.5 billion—including a new high of about $500 million in Indian farm products. This would be almost five times greater than the 1965-69 average.

India's agricultural exports to the Soviet Union are forecast to reach record levels in 1977 with the USSR accounting for about one-fourth of all Indian farm exports. Moreover, the dramatic growth in total Indo-Soviet trade is expected to continue over the near term.

India's total exports to the Soviet Union may climb to $800 million this year, up from $502 million in 1976, if all shipments of commodities are made as scheduled. Spurred by higher prices for tea and coffee, India's farm product exports to the USSR may hit a new high of $500 million. This compares with about $335 million last year, $339 million in 1975, and an average of about $110 million during 1965-69.

Soviet exports to India—consisting mostly of factory equipment, aircraft, cotton, paper, and petroleum—could reach $650 million in 1977, up from about $500 million last year.

During the last decade, Indian exports to the Soviet Union have averaged about one-fourth higher in value than imports from the USSR, largely because of payments for prior purchases of Soviet steel mills and other factory equipment.

With back-to-back bumper foodgrain harvests of a record 120.8 million metric tons in 1975/76 and about 110 million tons in 1976/77, India proposed to repay a 1973 Soviet grain loan by shipping about 1.5 million tons of wheat, valued at about $160 million, to the USSR this year. Soviet grain technicians, arriving in India in July, have approved the wheat shipments, which are scheduled to begin in October. These exports from Indian ports may reach 1 million tons in late 1977. A large part of this wheat is likely to go to third countries on the Soviet account, including Vietnam.

Repayment of the Soviet loan in wheat would also help relieve India's storage problem caused by excess supplies. It is likely India's final payment may include some soft wheat, with the balance being imported hard wheat.

In 1976, India's leading farm exports, by value, to the Soviet Union, with tonnage in parentheses, were: Tea, $72 million (50,200); cashew kernels, $32 million (15,200); tobacco, $27 million (16,100); hides and skins, $40 million (11,000); coffee, $40.3 million (15,600); spices, $18 million (9,950); peanuts, $9.8 million (19,000); castor oil, $3.2 million (6,500); wool, $4.0 million (2,300); shellac, $1.9 million (1,200), jute, $1.4 million, (3,500); and horticultural products, $3.8 million (11,500). Increases in export value of all these commodities, except peanuts, are seen in 1977.

In 1974, India's wheat crop was below expectations and food prices soared, almost doubling the 1971 level by late 1974. As well, the Government adopted measures to clamp down on private traders. Then, the combination of a bumper 28.3-million-ton wheat harvest in 1976 and strict Government control of marketing led to a record wheat procurement, totaling 6.6 million tons, by the Food Corporation of India.

As a result, the Government grain stocks reached 18 million tons in late 1976, including 6 million tons stored temporarily under plastic. Losses due to rodents, insects, and spoilage in these facilities have become serious and they could worsen during the monsoon rainfall. These problems prompted India to explore wheat export prospects. Also, India plans to increase sharply its permanent-type grain storage beyond the present 14 million tons, so grain exports in times of plenty will not be necessary.

Although India's wheat exports to the USSR in repayment of the wheat loan are expected to be a one-time occurrence, the rapid Indo-Soviet trade growth in other areas should continue. For example, India plans to begin large exports of pig iron and steel to the Soviets this year.

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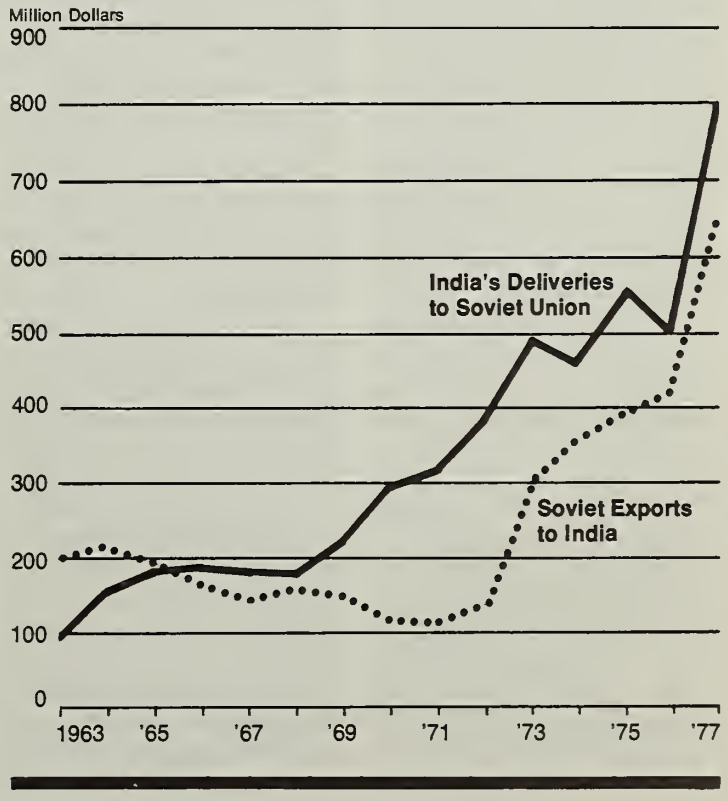
**The Growth in Total Trade Between India and the Soviet Union, Annual 1963-77.**



During 1974-76, however, the major Indian export to the USSR was tea, which rose from 17,400 tons (valued at $23 million) in 1966 to 50,200 tons (valued at $72 million) in 1976. This year, Indian tea exports to the Soviets are forecast at 66,000 tons, worth about $140 million—by far India's largest agricultural export to the USSR.

Russian consumers get over 90 percent of their imported tea from India as well as a large portion of their coffee, cashew kernels, and peanuts. When the People's Republic of China (PRC) phased out deliveries of tea, coffee, and nuts to the USSR in the early 1960's, Moscow trade planners looked to India to fill the gap. Since then, the growth of Indian exports of beverage crops, nuts, spices, and hides has provided Soviet consumers with more adequate supplies of these products, which were often scarce in the 1950's.

Indian tobacco temporarily helped replace imported Chinese tobacco in Soviet cigarette factories following the halt of PRC deliveries in 1961. Soviet imports of Indian tobacco averaged 20,000 tons during 1962-65, but fell to an average of 6,800 tons during 1966-69.

India's tobacco exports to the USSR in 1976 were 16,100 tons, compared with 24,100 in 1975.

Over the past decade, India has sent more farm commodities than any other developing country to the Soviet Union. But in 1972, Indian exporters were concerned about Soviet purchasing agents using rupees, obtained from building factories or machine exports, to buy most of India's exportable supply of cashew kernels, pepper, hides, and skins. That year, India began to limit shipments of cashew kernels and other commodities. These limits had to be imposed to save scarce supplies for export to hard currency markets, mainly the United States and Western Europe.

India's peanut exports to the USSR increased from 4,000 tons in 1968 to about 28,000 last year. However, India limited peanut exports to all countries in 1977, largely because of rising prices for peanut oil within India. Indian peanut exports to the Soviets are expected to tumble to about 11,000 tons this year.

As deliveries from India declined, the United States sent 3,000 tons of peanuts to the Soviet Union in May 1977, valued at $2.5 million.

Soviet imports of Indian peanut meal jumped from 9,800 tons in 1964 to a peak of 126,400 tons in 1972. Last year, India stopped shipping peanut meal to the Soviet Union when sales to the European Community and Japan increased.

On June 8, 1977, the Government of India imposed a ceiling of 750,000 tons on peanut meal exports for fiscal 1977. About 600,000 tons were committed for export through June of this year. However, these did not include any commitments to the USSR.

India's halt of peanut meal shipments to the USSR last year contributed to larger U.S. soybean sales to the Soviets.

During the last decade, India was able to dispose of surplus supplies of tea, tobacco, and castor oil through shipments to the Soviet Union. Also, plans to develop new exports are being encouraged by opportunities to sell products in the large Russian market. In recent years, the Soviet Union has become the leading export market for some of India's less important exports, such as pepper, cassia, and mango juice. □

# World Grain Estimate 9 Million Tons Short of '76 Record

The mid-October forecast of USDA of world production of wheat, coarse grains, and rice is unchanged from the mid-September forecast and therefore remains 9 million tons below the record grain outturn of 1976.

However, world wheat and coarse-grain trade during 1977/78 is now projected at a record 146 million tons, surpassing last year's level by almost 3 million tons, largely as a result of an upward revision in the forecast of USSR grain imports.

World wheat trade during 1977/78 is now estimated at about 69 million tons, 12 percent greater than last year's volume and a new record.

World production of wheat, coarse grains, and rice in 1977 currently is estimated at 1,436 million tons.

Gains in the U.S. corn crop, Canadian wheat and coarse grains, West European coarse grains, and some Asian rice crops have pulled up the world total, despite the 5-million-ton drop in the Soviet outturn and a sizable decrease in Australian wheat production.

The aggregate world wheat outturn has been revised downward by almost 6 million tons, and coarse grain and rice totals have been revised upward by 3.5 million and 2 million tons, respectively.

Perhaps the single most significant development since mid-September relates to the propect for somewhat higher Soviet imports of wheat and coarse grains.

In part, this change in assessment reflects the reduced estimate of the 1977 USSR crop and a substantial new Soviet purchase of Canadian wheat in September.

An equally important factor, however, and probably of much more long-run importance, is the upward revisions in estimated USSR requirements of grains for animal feeding. This reduces the likely quantity of stock rebuilding the USSR might otherwise have been able to achieve in 1977/78.

For 1977/78 (July-June), USSR net imports of total grains are now pegged 5 million tons higher than the mid-September forecast. Imports of wheat and coarse grains are currently forecast at 13 million tons.

Total wheat and coarse-grain imports during the 12 months beginning October 1, 1977, might be somewhat higher, perhaps about 15 million tons.

In general, there has been a further strengthening of

*Excerpted from FAS Circular FG 21-77.*

the market situation for foodgrains, especially for milling-quality wheat.

In contrast to the situation of this past year, when prices for grains for both food and feed usage were unusually close on world markets, these prices have tended to diverge recently.

The noticeable shift in the balance of global supply-demand forces that began to emerge in mid-September for wheat currently is more evident with the further drawdown in wheat stocks.

At this stage of the 1977/78 season, three factors appear most important between now and the time active speculation begins on the size of the probable 1978 crop outturn:

- Further clarification of Soviet import plans and requirements.
- The outturn of important Southern Hemisphere crops of wheat (to be harvested in November/December) and corn (to be harvested next March-May).
- Further clarification of the basic level of livestock feed demand in Western countries.

## Soviet Wheat Crop Down

The 5-million-ton reduction in the 1977 USSR wheat production estimate reflects the continuance of poor spring wheat conditions. Wheat output is now forecast at 95 million tons, down from September's forecast of 100 million tons; the Soviet production forecast for coarse grains remains unchanged at 105 million tons.

Total USSR grain production is now estimated at 215 million tons, consisting of 200 million tons of wheat and coarse grains and 15 million tons of miscellaneous grains, rice, and pulses.

This current grain production estimate is about equal to the Soviet plan figure of 213 million tons, but since the waste loss component currently is estimated to be at least 10 million tons larger than normal for a crop of this size, outturn in terms of usable grain seems likely to fall somewhat below preseason expectations.

Outside the USSR, downward revisions have also been made in wheat-crop estimates for Australia, because of persistent drought conditions over recent months, and for Argentina, where a prolonged drought was not broken until earlier this month.

In Canada, meanwhile, the estimate of the 1977 wheat crop has recently been increased; at the same time, however, cool, wet weather has continued to hamper the harvest in the Prairie Provinces. As of mid-October, a significant portion of the Canadian crop remained to be harvested.

World coarse grain production in 1977 is now estimated at almost 700 million tons, slightly above the mid-September estimate, largely because of the improved crop prospects in North America and Western Europe.

The aggregate forecast of coarse-grain output in Southern Hemisphere countries is about the same as that of mid-September; reductions in expected crops in Australia have been more than offset by higher crop estimates in Argentina resulting largely from increased area.

## World Trade Jumps

World wheat and coarse-grain trade during 1977/78 is now projected to total a record 146 million tons—surpassing last year's level by almost 3 million tons—largely because of an expected higher level of USSR grain imports.

World wheat trade during 1977/78 is now estimated at about 69 million tons, 12 percent greater than last year's and a new record. Major changes in wheat import estimates since the previous report include increases for the USSR (up 1.5 million tons) and Pakistan (up 300,000 tons).

These gains are partly offset by decreases for India (down 200,000 tons), Tunisia (down 150,000 tons), Indonesia (down 100,000 tons), and for several other countries.

Estimated Canadian exports are now pegged 2 million tons above last month's estimates, and U.S. exports were increased 1.4 million tons.

Soviet exports are projected to be off 1 million tons from the September estimate, and those of smaller exporting countries, down a total of less than 1 million tons.

The 1977-78 level of coarse-grain trade currently is forecast at about 78 million tons, up 3.5 million tons from the mid-September forecast and—as in the case of wheat—largely because of the 2.5-million-ton increase in the USSR import estimate.

To meet this higher level of world demand for coarse grains, export projections for the United States and Argentina have been increased 3 million and 1.1 million tons, respectively. These accelerated export projections have been partially offset by reductions in export estimates for Thailand and Australia of 300,000 tons each.

For Eastern Europe, the current estimate of net imports of total gains is larger than previously estimated, primarily because exports are expected to be down.

The Romanian corn crop apparently was less than earlier estimated because of summer dryness; in addition, because of the loss of some 15-20 percent of last year's corn crop resulting from inadequate drying and storage facilities, less is available for export shipment.

Hungarian corn exports also are expected to be small because of increased domestic requirements.

## World Rice Output Up

Rice production prospects have remained relatively favorable throughout most of the major producing areas since the previous report, and total world 1977/78 output is now estimated at 351 million tons (paddy).

Monsoon activity in India sharply diminished at the end of September, bringing to an end a season generally characterized by timely and evenly distributed precipitation.

Rice production currently is estimated at 70 million tons, up 1 million tons from the previous estimate. Production estimates for Japan and South Korea also has been increased 1 million tons and 200,000 tons, respectively, since the previous report.

Favorable crop prospects throughout much of Asia continue to indicate a reduction in world rice trade in 1978 to about 8 million tons, compared with this year's estimated 8.7-million-ton level.

The rice situation in Thailand remains uncertain, but it is likely that exports will probably reach at least 2.5 million tons in 1977. The level of exports and the absence of a domestic price increase indicate the 1976 production estimate of 15.5 million tons may be somewhat conservative. Thailand's exports in 1978 are expected to decline from this year's record level to about 1.6 million tons.

Inclement weather reportedly has reduced Italy's harvest prospects sharply in recent weeks. Exports in 1978 are now expected to be only about 250,000 tons, with the bulk of this rice likely to remain within the European Community. □

# Turkey Ups Investment In Textile Industry

**By Walter A. Stern**

Expanding domestic and foreign demand for Turkish cotton yarn has encouraged investors to back an expansion of more than 100 percent in the country's spinning capacity during the past 5 years. Despite the optimistic outlook for the industry, several problem areas exist. The weaving sector, for example, has not grown as rapidly as has spinning activity, and incentives may have to be offered.

Turkey's booming textile industry, aided by Government incentives and substantial export demand, plans to invest about $700 million in new equipment during the next 5 years.

Rising domestic and foreign demand for Turkey's cotton yarn, which owes its strength in part to tax rebates and export subsidies, already has encouraged investors to back an expansion of more than 100 percent in the country's total spinning capacity during the past 5 years.

Despite this record of success and a relatively optimistic outlook, several problem areas exist.

Growth in the weaving sector has not been as rapid as in spinning capability. The number of looms has remained relatively unchanged during 1972-77. Incentives for investment may have to be offered by the Government to stimulate expansion of weaving capacity.

Cotton yarn and cloth exports from Turkey began increasing after 1968, when the European Community (EC) was found to be a convenient market for Turkey's excess yarn and other textiles.

As Turkey increases its political and economic ties with the EC, its access to this market can be expected to increase.

Access at present is subject only to voluntary restraints agreed to by the Turkish Government.

In 1973, Turkey supplied about 12 percent of total EC yarn imports. By keeping prices low through the device of export rebates, Turkey was able to increase its share of total EC imports to 35 percent during 1976. In that year, a record 93 percent of Turkey's total yarn exports went to the EC.

EC cotton spinners, alarmed by this surge of imported cotton goods, protested to Community officials, who in turn asked Turkey to abandon its policy of tax rebates on yarn exports and to reduce these exports to the EC.

After lengthy negotiations, Turkey agreed to trim its subsidies on yarn exports by 15 percent and to accept a duty-free quota of 1,027 metric tons for 1977, with additional yarn shipments dutiable at a preferential rate of 50 percent off the regular rate. Consequently, the tariff for Turkey's exports of yarn to the EC varies from 2 to 4 percent, depending on type of yarn.

Turkey's imports of cotton yarn and textiles are limited by the Government to certain qualities that cannot be manufactured domestically.

Increased imports of yarn during 1974 and 1975 reportedly were for automotive safety belts, and the larger imports of cloth during that period were mostly canvas for the military establishment.

In 1972, when Turkey's textile industry began to expand rapidly, the spindle count was 1.3 million. By 1977, the total had zoomed to more than 3 million. Spindles in integrated mills accounted for 74 percent of the total. In part because expansion of weaving capability has not kept pace with spindleage, that figure is expected to decline to about 45 percent this year.

Integrated private mills increased their spindleage by about 49 percent from 1972 to 1975, while spindle numbers in unintegrated private mills jumped 307 percent in the same period .

The total number of looms in Turkey in 1977 is estimated at about 40.2 million, of which about 20 percent are publicly owned and 80 percent in private hands. In the public sector, the spindle-loom ratio averages 67.8:1, whereas in private operation the average is 76.3:1. The national average ratio is 74.6:1.

In contrast to Turkey's steady rise in export and domestic demand for yarn between 1970 and 1977, demand for cloth fluctuated during that period, jumping from about 800 million meters in 1970 to 930 million meters in 1972, then declining to 883 million meters in 1974. It is projected at 1.3 billion meters in 1977. The drop in demand between 1972 and 1974 was a result of inflation, which forced textile prices up.

Manmade fibers are not now a serious threat to the use of cotton by Turkey's textile industry. Although production has not kept up with demand, only about 7 percent of the textile industry's total fiber requirements are supplied by manmade fibers.

Turkey's cotton production has expanded slowly since 1970. At that time, output totaled about 400,000 tons. In 1974, it peaked at about 600,000 tons and then declined as a result of an infestation of white fly. These insects have now been largely eradicated, and a crop of about 600,000 tons is expected for 1977.

Subsidies on Turkey's textile exports were necessitated mainly by high support prices for cotton. Textile

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*U.S. Agricultural Attaché in Ankara, Mr. Stern also prepared the dispatch from which the report on the opposite page is based.*

production costs also have increased because of wage rises and relatively low productivity.

The required reduction in subsidies and the tight credit situation have made it difficult for textile manufacturers to purchase high-priced cotton. The Government may develop a scheme to supply domestic mills with less expensive cotton to compensate them for the absence of rebates.

Since it is politically unrealistic to expect a reduction in the support price of cotton (about 57 U.S. cents per kilogram of seed cotton), the Government may instead decide to pay an additional subsidy to all textile manufacturers to maintain the present level of export.

The Government is planning large projects in the southeast region, where soil and climate are very favorable for cotton production. In 8 to 10 years, when these projects are complete, Turkey's cotton output could total more than 1 million tons annually. Under present plans, most of this production would be utilized in the manufacture of yarn and other fabrics, rather than raw materials for export. □

# Turkey Boosts Cotton Area and Output

Turkey's cotton production should jump substantially in 1977, and exports during 1976/77 may well double those of the previous year.

Turkey's cotton production during 1977 is expected to total about 600,000 metric tons (2.8 million bales of 480 lb net) from about 800,000 hectares—totals 26 and 38 percent higher, respectively, than 1976 levels.

About 250,000 tons (1.1 million bales) of cotton may be exported during 1977/78, assuming that about 340,000 tons (1.6 million bales) of cotton will be consumed by the domestic industry from an estimated 1977/78 supply of 671,000 tons (3.1 million bales).

*Trucks and wagons bring bales of cotton to a Turkish wharf for export.*

An 8 percent devaluation of the Turkish lira, effective September 21, and a 15-percent export subsidy are making Turkey's cotton more competitive in the world market.

Prior to these moves, the support price plus ginning and other charges brought the f.o.b. price of Aegean cotton to about $1.57 per kilogram (71 U.S. cents per pound)—about 20 percent above the world level.

Taking into account the devaluation and the export subsidy, the f.o.b. price was estimated at about $1.21 per kilogram (55 cents per pound). Turkey also subsidizes yarn exports, which have expanded sharply in recent years.

Turkey's cotton exports during 1976/77 amounted to about 125,000 tons (575,000 bales), down sharply from the previous year's 471,000 tons (2.2 million bales), which benefited from Government rebates.

Registered export sales of cotton during the 1976/77 market year amounted to 179,546 metric tons (80,906 tons Aegean, 84,467 tons Cukurova, and 14,173 tons Antalya cotton). Actual shipments during the first 11 months of 1976/77 marketing year (August-July), however, totaled only 114,295 tons.

Increased demand by textile mills which received Government subsidies for yarn and cloth exports and booked nearly 110,000 tons of yarn for export, and a relatively tight supply of cotton in 1976/77 kept local prices high and discouraged raw cotton exports.

Based on Izmir export statistics, about one-third of the 1976/77 Aegean cotton sales were booked for the Far East, which during the previous year had taken less than one-fifth of Aegean cotton exports.

Republic of China (Taiwan), Thailand, Bangladesh, and India, in particular, have increased their imports from Turkey while the People's Republic of China (PRC) has kept its imports at the same level as in 1975/76.

Shipments to the European Community (EC) countries, however, have registered notable declines, whereas Switzerland has increased its imports by about 53 percent.

The EC's reaction to highly subsidized (20 and 25 percent) Turkish yarn exports, which forced the Government to reduce the tax rebate rates (to 5 and 10 percent) on March 14, 1977, has

caused confusion among textile manufacturers.

Since almost all of the yarn export sales were registered prior to March 14, 1977, however, the reduction of subsidies did not affect 1976/77 yarn exports. Nonetheless, textile manufacturers, who are suffering from power shortages and ever increasing labor union demands, have begun to ask special incentives from the Government for the 1977/78 marketing year.

These sources claim that they have to continue to operate in three shifts in order to keep already hired workers employed and maintain their marginal production. Raw cotton exporters, on the other hand, suggest that yarn production should be restricted in order to prevent probable accumulation of surplus yarn stocks.

These exporters also suggest that yarn manufacturers should be encouraged to move one step further and produce cloth or finished dresses that may be more readily marketed. Such an expansion, however, would require time, and current indications are that some mills will either minimize production or remain with larger yarn stocks unless the Government decides to protect the local textile industry.

Fewer cotton shipments than anticipated earlier and a higher production estimate necessitated an upward revision in stock estimates. The commercial cotton stocks on August 1, 1977, were around 71,000 tons (326,000 bales) about two-thirds of which were actually booked for export.

Assuming that about 250,000 tons will be shipped, and about 340,000 tons will be utilized by the local textile industry while about 10,000 tons will be unaccounted for, stocks on July 31, 1978, would remain at 71,000 tons. □

# Weather Affects PRC Crops

It is too early yet to assess the condition of late-harvested crops in the People's Republic of China (PRC), owing to the unprecedented variations in weather patterns that have affected crops. Also, the harvest season has not advanced sufficiently to elicit official comment.

By early September, most of the unusual weather gyrations of late July and August had subsided, and sunny skies, together with normal to below-normal precipitation during most of the month, gave both crops and peasants tending them a respite from too much precipitation in most crop-producing areas.

In many areas, rainfall (sometimes accompanied by hail) was excessive—particularly in central and east China, portions of the North China Plain, portions of northwest China, and to a lesser extent in southwest China. Tremendous effort was reportedly expanded in these areas to minimize the area of flooding and to reduce the effect of both flooding and waterlogging on growing crops.

In assessing general crop conditions in early September, one PRC official stated that autumn crops in most areas were promising and a bumper harvest was in sight—but then cautioned that a bumper harvest in sight does not equal a bumper harvest in hand. He further cautioned that . . . "early frosts and low temperatures are still threatening the northern regions of the country, while disastrous rains, floods, and winds are still possible in the southern regions."

Workers in trades and professions have been alerted to the probable necessity of an allout effort to assist in the autumn harvest throughout the countryside and also to assist where needed in the planting of winter crops, which are receiving special emphasis this year.

A number of conferences have been held by the Ministry of Agriculture and Forestry in winter crop areas to stimulate more timely planting operations and to significantly expand the area of fall-planted crops, particularly winter wheat. Both weather conditions and management practices favor this action.

The thrust for an overall record harvest in the agricultural sector this year has been blunted at almost every turn by the vagaries of weather.

The extremely cold winter and spring threatened the Yellow River Basin with flooding owing to ice floes and also affected winter crops in the north where snow cover was light.

The extended and severe spring drought affected almost all winter crops, reduced the winter wheat crop, and created problems of delayed sowing during the spring planting season. This resulted in some substitution of crops, delays in planting

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*By Foreign Demand and Competition Division, Centrally Planned Countries Program Area, ERS.*

# PRC Wheat Imports To Be Up

The People's Republic of China (PRC) has made no major grain purchases since July, but deliveries on amounts contracted for earlier this year have accelerated.

Deliveries of grain (all wheat) in the first 6 months of 1977 totaled approximately 2.3 million metric tons. Nearly double this amount will move in the last 6 months of the year, and calendar 1977 imports of wheat should total about 7 million tons.

Deliveries of wheat on outstanding contracts are expected to continue at high levels throughout the first half of 1978. Record wheat imports—over 9 million tons—are anticipated in 1977/78 (July-June), up sharply from the more than 3 million tons imported in 1976/77. Almost all PRC grain purchases have been of wheat, although a small amount of corn reportedly has been purchased from Argentina.

PRC rice exports have been off sharply this year. Total exports in 1977 are estimated at 500,000 tons, 45 percent below the 1976 level of 900,000 tons.

China has recently purchased an additional 10,000 bales of U.S. cotton for delivery during the 1977/78 marketing year. This purchase raises total purchases of U.S. cotton for delivery during 1977/78 to 193,000 running bales—the first significant import of U.S. agricultural products since 1975. These purchases seem to indicate PRC plans to increase total cotton imports in 1977/78 from the estimated 650,000 bales imported in 1976/77. □

# Canada Registers Gains In Apple, Pear Output

Canada's 1977 apple production is forecast to rise 5 percent thanks to increases in Ontario and Quebec Provinces, whose combined total is expected to account for 51 percent of the country's crop of 428,400 metric tons. Meanwhile, pear prospects point to a more normal harvest of 34,900 tons, up 19 percent from 29,257 tons in 1976, as Ontario's output recovers from last year's low level.

The favorable trade balance in fresh apples the United States has maintained with Canada since 1973/74 is expected to continue in 1976/77. About 90 percent of imported U.S. apples reach the Canadian fresh-table market while half of Canada's apple exports to the United States enter lower-value processing channels. Reflecting 1976's poor pear crop, Canadian 1976/77 exports are forecast to plunge drastically as imports jump almost to the level of last year's domestic production.

Ontario's 1977 apple production is pegged at 120,000 tons, up 4 percent from 1976's crop, which suffered poor weather during the pollination period. Although a widespread frost on April 29 caused some blossom damage, favorable weather followed and growing conditions in July were good.

Despite urban expansion on orchard land in Ontario, especially in the Niagara Peninsula region, the number of apple trees in the Province has increased from 1.4 million in 1971 to 1.9 million in 1976. Approximately 600,000 trees, under 5 years of age, are expected to reach maturity by 1981. Thus, Provincial officials believe Ontario soon will be able to produce about 152,000 tons annually.

The biggest production boost occurred in Quebec Province although apple trees suffered some winter damage because of a lack of snow. However, sunny weather prevailed during pollination and a crop of 99,800 tons is expected, an increase of about 27,500 tons from 1976's crop.

Apple production in British Columbia, the country's largest apple-producing province, is forecast at 162,400 tons, slightly under last year's 172,400 tons. Slight declines also are expected in Nova Scotia, down 6 percent to 41,300 tons, and in New Brunswick, down 11 percent to 4,760 tons.

Although Canadian apple growers have been concerned since 1973/74 about the volume of imported U.S. fresh apples, the U.S. fresh-apple trade surplus is estimated at 30,800 tons, valued at nearly $19 million, during 1976/77. Canadian apple imports are forecast to rise 27 percent to 78,300 tons while exports jump 17 percent to 50,900 tons. During 1976/77, the United States' share is estimated at about 83 percent of Canada's fresh apple imports. Also, 68 percent of Canada's 1976/77 fresh apple exports goes to the United States.

In the spring of 1977, the Tariff Board's report to the Minister of Finance recommended retention of the free rate for fresh-apple imports under Most Favored Nation status. If extended, price and availability should continue to dictate the volume of apples imported from the United States.

Securing new markets is the greatest challenge facing Canada. Although the United Kingdom is still an important buyer, higher tariffs following the U.K. entry into the European Community have reduced shipments to that market. However, sales to Hong Kong and the Caribbean are expanding.

Rebounding from its light 1976 pear crop, Ontario's production increase this year more than offset a decline in British Columbia's output. A heavy bloom followed by ideal pollination conditions in Ontario produced gains in all varieties, especially Bartletts. The 1977 crop is pegged at 15,400 tons, compared with a disappointing 6,180 last year.

British Columbia had full-crop potential until the bloom period, but variable weather during the growing season pushed prospects down to about 18,000 tons, 16 percent under last year's outturn.

Reflecting Ontario's extremely poor 1976 crop, Canadian fresh-pear exports during the 1976/77 crop year are estimated at only 91 tons, compared with 1,678 a year earlier.

As a result of 1976's production shortfall, Canadian fresh-pear imports are placed at 27,700 tons in 1976/77. Of these, 25,039 tons, valued at nearly $8 million, are expected to come from the United States—an increase of 14 percent in volume and 8 percent in value. □

*Based on report from Office of U.S. Agricultural Attaché, Ottawa.*


## Foreign Agriculture

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## PRC Crops

others, and poor stands in some areas.

The sudden turn from dry to wet weather from April through most of August created special problems. Crops on higher, well-drained land probably fared better than usual, while those in low-lying areas were subject to flooding and waterlogging.

The return of normal to below-normal precipitation during September proved to be a most important period of recuperation and growth for the later maturing crops. Drier September weather also was a boon to the harvesting of the earlier maturing autumn crops. In some local areas, however, particularly north of the Yangtze River, drought conditions were being mentioned in late September, and supplemental irrigation was needed.

October, the harvest month for most miscellaneous grains, tuber crops, cotton, soybeans, peanuts, sugar crops, and late rice, came in wet. Almost 90 percent of those crop-producing provinces that report weather reported above-normal to much-above-normal precipitation for the first third of the month. A wet harvest period could have a deteriorating effect on the quality of the harvested product and could cause some serious storage problems. If the predicted early frosts occur, yields could be affected.

The water conservancy program was tested to the limit this year and apparently was successful. The huge reservoirs were utilized for river control when unusual ice floes in the Yellow River in early spring threatened levels that would have caused flooding.

The catchment water in reservoirs was later used to irrigate large areas of farmland in Honan and Shantung Provinces. Again, during the summer, extended efforts by peasants in strengthening levees and expanding reservoirs prevented flooding by the river in a 1-month span when the water peaked three times at higher levels than had occurred during the last 40 years, thus preventing flooding on the lower reaches of the river.

The effectiveness of these facilities has meant the difference between a disastrous year for agriculture and what may be a fairly good year, assuming no further unusual weather conditions.

But the year has been a trying one. Problems with the winter wheat stimulated increased efforts to expand the area of early rice and spring wheat. Both endeavors were successful, but the increased production was not enough to offset the shortfall of winter wheat and other winter grains.

Grain purchases abroad were increased to new records, and an unprecedented campaign was launched to produce more late rice than early rice. This resulted in an increase in late rice area and in getting late rice transplanting completed in better condition and on a more timely schedule than in previous years. However, weather conditions were conducive to disease and insect infestation.

Of all the 1977 crops, less is known about the important coarse grains, especially corn, sorghum, and millet. These crops were vulnerable to the early spring drought and subsequently to the excessive precipitation described above.

If the Chinese official's statement on autumn crops included these grains, and can be accepted, their output combined with what presently appears to be an increased output of late rice could bring total grain production slightly over the poor 1976 crop.

The miscellaneous grain crop will weigh heavily in the final total grain output. Tuber crops, for which no reports are available, also add somewhat to the question of the final harvest figure. The evaluation of these crops will have to await harvest results.

No significant information on other crops has become available since the September report. □